



e-news

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READER'S RESPONSE

The editorial team invites your views, suggestions, to the News
about Members Column and contributions to the e-news.

Madhya Pradesh plans \$5 bn aviation city

Madhya Pradesh is planning India's first aircraft repair and maintenance facility and cargo hub - an aviation city - to be set up at a cost of Rs.200 bn (\$5 bn). "At present the nearest such facility is in Singapore," state minister and government spokesperson Mr. Kailash Vijayvargiya told. The facility will be located at Dabra in Gwalior district, the minister said, adding: "A cabinet meeting chaired by Chief Minister Mr Shivraj Singh decided that the state government will provide 7,000 acres of land for the aviation city." "The major portion of the land for the project belongs to Dabra Sugar Mill and the rest will be provided by the government. It will also have a cargo hub," Vijayvargiya said. "It will be the country's first aviation city and will have facilities for repair and maintenance of aircraft.

Source: *Economic Times*

LCA to be fitted with Israeli multi-mode radar

The indigenous Light Combat Aircraft (LCA) Tejas will, after years of delay, soon be fitted with its primary mission sensor, the multi-mode radar (MMR). Mr P.S. Subramaniam, Programme Director, Aeronautical Development Agency (ADA), the defence laboratory that is designing the LCA, told *The Hindu* that "airworthy units" of the Israeli - manufactured MMR would be arriving here early next week for integration into the aircraft. The Elta designed and developed MMR, Elta EL/M-2052 which will be an interim option since India is developing an indigenous one, has already undergone tests on the flight test bed and ground rig in Israel. One of the most crucial pieces of equipment on any fighter aircraft, the MMR determines the operational effectiveness of the machine, with no fighter aircraft being in a position to perform as one without an MMR.

Source: *Hindu*

Tatas propose aerospace hub in AP

Tata Group firm Tata Aviation System has proposed to set up a Defence and civil aerospace hub in Andhra Pradesh at an investment of Rs 500 crore. State chief minister Mr YS Rajashekar Reddy today informed that Tata Group chairman Mr Ratan Tata had written a letter to him recently stating that Tata Aviation System was keen

to invest in a aerospace hub in the proposed special economic zone in Adibhatla village, on the outskirts of the state capital. The proposed aerospace hub would manufacture satellite systems, radar systems and allied equipment. Mr Reddy, who was speaking at the inauguration of the India Aviation-2008 at the old Begumpet airport, said the state government would make 50 acres of land available for the Tatas at the proposed SEZ that would come up near the hardware park.

Source: *Statesman*

Looking beyond Chandrayaan-I

The country's first Moon mission Chandrayaan-1 that is scheduled to take off on October 22 will not mark the end of India's interplanetary missions. The much-awaited lunar odyssey will, in fact, kick off a slew of ambitious space programmes. At various ISRO establishments, scientists and engineers are working on space projects that will be a follow-up to Chandrayaan-1. As a first step, ISRO and Russia's Federal Space Agency (Roskosmos) had, on November 14, 2007, agreed to team up on joint lunar research and exploration as part of Chandrayaan-2 mission. This agreement, approved by the Union Cabinet a few days ago, involves an orbiting spacecraft and a rover that will land on the Moon. Chandrayaan-2, which is expected to lift off from Sriharikota some time between 2010 and 2012, will have a budget of Rs 425 crore. The amount is slightly more than the current mission which is costing India Rs 386 crore. The spacecraft will be designed and developed by ISRO, while the rover will be a Russian product.

Source: *Times of India*

NAL eyes passenger aircraft

National Aerospace Laboratories (NAL) Director A R Upadhya said that Asian countries should work towards charting a continental collaboration for manufacturing passenger aircraft as the continent was witnessing a huge growth in the civil aviation sector. Speaking at the Asian Network of Major Cities (ANMC21) working level conference on Jet Passenger Plane, he said: "It would be prudent for Asian countries to take smaller and gradual steps in this direction by initiating joint projects of advanced technology development involving academia and R&D institutions in relevant areas." He said that India would roll out the turboprop of 70-seater Regional



Transport Aircraft developed by India under CSIR-NAL initiative, in six to seven years.

Source: Indian Express

ISTRAC takes control of Chandrayaan-1

ISRO Telemetry, Tracking and Command Network (ISTRAC) Peenya, which will guide the spacecraft to the moon, has taken control and command of Chandrayaan-1 spacecraft after a perfect launch from Sriharikota at 6.22 am. While the first phase of the moon mission has gone perfectly, now, it's the second and critical phase — a waiting period of 15 days for Chandrayaan-1 to settle down into lunar orbit, as close as 100 kms to the moon. ISTRAC established contact with Chandrayaan-1 17 minutes after lift-off when the fourth stage of the PSLV separated and injected the spacecraft into orbit. ISTRAC's control room will monitor every movement of the spacecraft for the next two years, including its arrival lunar orbit around November 8. "There were scenes of jubilation, hugging and sharing of sweets between engineers," ISTRAC deputy director O Chiranjeevi told TOI.

Source: Times of India

Chandrayaan-1 has more challenges ahead: ISRO chief

After the initial celebrations over the successful launch of PSLV-C11, Indian Space Research Organisation scientists are now looking forward to some more challenging days, when the Chandrayaan-1 spacecraft will have to be manoeuvred from an earth orbit into a 100-km lunar orbit to reap the benefits of the most prestigious of Indian space odysseys. Two hours after PSLV-C11 injected Chandrayaan-1 spacecraft into an earth orbit, ISRO chairman Dr G Madhavan Nair and other scientists walked into the Brahmprakash Hall where over 200 journalists had gathered from across the country. He spoke about "India opening a new chapter in the history of space programme" with the commencement of the first leg of the Moon journey.

Source: Times of India

Landmark in our space programme: President Pratibha Patil

President Pratibha Patil led the nation in congratulating the scientists of the Indian Space Research Organisation (ISRO) on the successful launch of Chandrayaan-1, India's

maiden mission to the moon. In a message to ISRO Chairman Dr G. Madhavan Nair, the President said: "This day shall go down as a landmark in our space programme, a day which will inspire our space scientists to further work on our mission to put an Indian astronaut into space using an Indian space capsule. I am keenly looking forward to the entry of Chandrayaan-1 into the lunar orbit a few days from now." Vice-President, M. Hamid Ansari said space scientists had made the country proud with "this extraordinary achievement." It demonstrated the high level of technological capability of the scientists.

Source: Hindu

Antenna for moon mission inaugurated

As the countdown is set to begin for the October 22 moon mission shortly, the 32-metre antenna, part of the Indian Deep Space Network (IDSN) that will track Chandrayaan-1 lunar spacecraft through its historic odyssey, was inaugurated on Friday by ISRO Chairman Dr G Madhavan Nair. The antenna system installed at Bialalu would provide telemetry, command and science data reception functions for the upcoming mission, as well as such ventures in future, officials said. The antenna was designed and commissioned by Hyderabad-based Electronics Corporation of India Limited at a cost of Rs 62 crore to Rs 65 crore, ECIL's Chairman and Managing Director K S Rajasekhara Rao said. "The challenge of realising this fully steerable 300-ton structure has been achieved in record time using indigenous technical skills," he said.

Source: Deccan Herald

World hails ISRO

The US and Europe led the world in hailing the successful launch, saying New Delhi has demonstrated its technological prowess and was emerging as an "ever stronger space power." "The US congratulates India on the successful launch. This is a proud moment in India's history and demonstrates India's technological prowess by joining the international community in the peaceful exploration of space," US ambassador to India, Mr David C Mulford, said. He said the US was proud to participate in the mission as the country had provided two instruments for it. "Ahead of the launch, scientists from the United States worked closely with their Indian partners to prepare the US contribution to the Chandrayaan spacecraft, exemplifying the ideals of our bilateral partnership," he said. David Southwood, director of science at the Parisbased European Space Agency (ESA), said the European-made instruments aboard India's Moon probe were the hallmark of closer cooperation between the two spacepowers.

Source: Times of India

An international mission with India as captain

Although 60 spacecraft have been sent since 1959 to study the moon, this is the first time that as many as 11 scientific instruments are being carried on a spacecraft, Chandrayaan-1 — five from the Indian Space Research Organisation, two from the National Aeronautics and Space Administration, three from the European Space Agency and one from Bulgaria. Mr M. Annadurai, Project Director, called the spacecraft "an international mission with India as the captain." "We are carrying a spectrum of instruments that people have not sent to study the moon earlier." Addressing a press conference at Sriharikota after the PSLV-C11 successfully put Chandrayaan-1 into its initial orbit, ISRO Chairman Dr G. Madhavan Nair said the scientific instruments on board were "unique for the spectrum of their coverage."

Source: Hindu

IAF launches modernisation drive

The Indian Air Force (IAF) has launched a major modernisation drive at the end of which IAF expects to have 230 frontline Su-30 MKI and 126 medium multirole combat aircraft (MMRCA) as the force's mainstay.

"The IAF is in the process of acquiring more than 300 helicopters, upgrading the transport fleet, having more force-multipliers and upgrading all air bases in the country," IAF chief Fali Homi Major said here. "Licensed production of Su-30 MKI has begun, but we want to expedite the process. By the end of 2014, we intend to have 230 Sukhoi fighters," he said. The technical evaluation for purchasing 126 MMRCA is expected to be completed early next year, following which the government will start price negotiation with the chosen vendors for the Rs 42,000 crore deal.

Source: Deccan Herald

China's manned space programme marches ahead

The Chinese manned space programme has taken another decisive step forward. The recent three-day mission of Shenzhou-7 saw the spaceship carrying its full complement of three astronauts, one of whom carried out China's first space walk. The next set of missions could see an ambitious effort to create a space laboratory by docking multiple spacecraft. China then intends establishing a permanently manned space station. There is talk too of the country sending its own astronauts to the Moon. China's interest in manned space flight appears to go back to the 1970s. But a serious effort to achieve that goal began only when a programme, code-named "Project 921," received government approval in 1992.

Source: Hindu

Payload bearing Tricolour will land on Moon

On November 10 or 11, the national flag will be hoisted on the Moon. When the Moon Impact Probe (MIP), bearing the Tricolour, ejects from the Chandrayaan-1 spacecraft and crashlands on the lunar surface, it will mark India's leap into the club of countries aiming for the Moon. "A small Indian flag (4 inches by six inches) has been painted on the moon impact probe. This is a matter of pride and honour, and when the MIP lands on the Moon, it will signal India's entry into one of the intriguing aspects of the universe," ISRO officials told TOI. The 29-kg MIP, which was not part of the project initially, was inducted into the spacecraft at the insistence of former President Dr A P J Abdul Kalam. The payload developed by the Vikram Sarabhai Space Centre at



Thiruvananthapuram will help identify future landing sites on the Moon and will also aid scientific exploration of the lunar surface.

Source: Times of India

Ground support for Moon mission

The ground segment for Chandrayaan-1 comprises three major elements — Deep Space Network, Spacecraft Control Centre and Indian Space Science Data Centre. These will provide to and fro conduit of communication, secure good health of the spacecraft, maintain orbit and attitude and conduct payload operations. The ground segment is also responsible for making science data available to technologists/scientists, along with auxiliary information, in addition to storage of payload and spacecraft data. Deep Space Network-The Deep Space Network is a pair of fully steerable 18m and 32m antennae established at Byalalu, close to Bangalore. The network is augmented with a station in Bearslake, Russia and APL/JPL, USA, to improve the visibility duration. These antennae will be

colocated on the outskirts of Bangalore with built-in support facilities.

Source: Times of India

High-speed missiles can now extend the range

The Indian Institute of Science (IISc) has developed a new innovative technology for ramping up the range of high-speed missiles by reducing the drag encountered during its flight path. The recently launched Agni is one such high-speed missile. Prof. KPJ Reddy, who coordinated the research, explained: "The drag dictates the missile's range as the thrust generated by the rocket engine must compensate for the drag encountered by the missile. The missile's nose is essentially blunted to reduce the heating problem, but the drag encountered by the blunt bodies when they travel at hypersonic speeds (5-6 times the speed of sound) is more. Hence, one way of increasing the range of the missile or any vehicle is to reduce the drag force."

Source: Times of India

ISIS Group to buy 10 Hawker jets for chartered operations in India

Aircraft manufacturer Hawker Beechcraft Corp (HBC) announced that the UK-based investment company ISIS Group has placed orders worth \$70 million for 10 Hawker 400XPs light jets for its chartered operations in India. The order marks ISIS Group's initial aircraft purchase for its new investment in Indian aviation industry. 'We are thrilled that ISIS chose the Hawker 400XP as the aircraft to launch its charter jet service. This order highlights the growing demand in India for private aircraft and also fortifies Hawker Beechcraft as the superior choice for business travel,' HBC president-commercial sales Brad Hatt said in a statement. Arun Sharma, managing director of the Bangalore-based Aviators India Pvt Ltd, which will operate ISIS' Hawker aircraft on lease, said the delivery of five Hawker 400XPs was planned during 2009, while the remaining five aircraft were expected to be delivered in 2010.

Source: Sindh Today

AI, Airbus to sign MRO deal tomorrow

Air India has lined up four MRO (maintenance, repair and overhaul) facilities in the country in association with global leaders in the segment. The company, which has already announced plans to set up an MRO in a joint venture with Boeing, would sign an agreement with Airbus. "We are going to sign the deal with Airbus during the four-day India Aviation-2008, the maiden aviation conference-cum-expo at Hyderabad," Mr Jitender Bhargava, Executive Director, said. He, however, refused to spell out further details on the proposed MRO. The MRO segment is one of the few areas the public sector airline is looking at to augment revenues from other areas of aviation business. The company has decided to establish different SBUs (strategic business units) after completing major portion of the merger process with Indian (formerly Indian Airlines).

Source: Business Line

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ISRO teams bag global award

The team from Indian Space Research Organisation, which successfully realised the Polar Satellite Launch Vehicle (PSLV-C7) mission that launched CARTOSAT-2 as well as the team that deployed and recovered Space capsule Recovery Experiment (SRE-1) have been awarded the prestigious Team Achievement Award of International Academy of Astronautics (IAA). The award was presented to the teams on September 28 at Glasgow, Scotland, UK during the Academy Day organised as part of the International Astronautical Congress (IAC). The achievement award was created by the Board of Trustees of IAA in 2001 to recognise extraordinary performance and achievement in the field of astronautics.

Source: Times of India

Eurocopter to set up pilot training centre in India

Sensing an opportunity in the shortage of qualified pilots to fly helicopters, European helicopter maker Eurocopter plans to set up a pilot training facility in India. "We are already in talks with some Indian entities for setting up a training institute where we can provide pilots for the helicopters," Norbert Ducrot, senior vice-president (Asia-Pacific) of Eurocopter.

Source; Indian Express

Minister exhorts youngsters to pursue career in aviation

All India Vayu Sainik camp, a national-level camp for Air Wing NCC cadets, was inaugurated by Minister for Higher Education Mr Arvind Limbavali here. The camp, an annual event, is being conducted by National Cadet Corps Directorate, Karnataka and Goa, here. Addressing the cadets, the Minister exhorted the youngsters to pursue a career in aviation. He said that the Government was thinking of introducing NCC in engineering and medical colleges as well. A proposal to increase the strength of NCC cadets by 20,000 was under its consideration, he added. Vayu Sainik Camp is the testing ground for all air wing activities of NCC. In this camp, 600 cadets, including 180 girls, from 15 directorates from across the country are participating. They will compete in aviation-related activities such as flying micro-light aircraft, gliding, aero-modelling, and skeet-shooting.

Source: Hindu

Where will the faculty come from?

With the Central government on a blitz to expand higher education in the country -

16 central universities, 14 world class universities, 8 IITs, 6 IIMs, 20 NITs and 370 degree colleges - an important question is where will the government find the faculty for these institutions? Former IISc director Prof G Padmanabhan has been pondering over this and other questions over the last few months as a member of the University Grants Commission's (UGC) - sixth pay review committee (PRC). In a chat with The Express, Prof Padmanabhan says that the Central government is starting nearly 80-90 new institutions under the XIth Five Year Plan. "If we assume that each institution requires a minimum of 100 faculty members, that will amount to around 10,000 posts that need to be filled," he says. "From where do we fill all these?" he asks.

Source: Indian Express

More engineering colleges to be part of EDUSAT network

The Indian Space Research Organisation (ISRO), Bangalore; the Visvesvaraya Technological University (VTU), Belgaum; and engineering colleges affiliated to the VTU on Monday signed a memorandum of understanding (MoU) for establishing an interactive VSAT Channel-1 with two-way video and audio network. This will bring more colleges under ISRO's EDUSAT network. A. Bhaskaranarayana; Director, SatCom, ISRO; VTU Vice-Chancellor Mr H.P. Khincha; and principals of VTU-affiliated colleges were present during the signing of the MoU. VTU was the first university in the country to use ISRO's EDUSAT facility in 2003. Under the project, it set up a studio to transmit expert lectures that will be received by all the colleges affiliated to it through the direct-to-home (DTH) reception system.

Source: Hindu



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New head for Air Command

Air Marshal S. Radhakrishnan will take over as Air Officer Commanding-in-Chief of the Southern Air Command. Commissioned into the fighter stream of the Indian Air Force in 1970, Air Marshal Radhakrishnan is an alumnus of the National Defence Academy. He is a qualified flying instructor and a fighter combat leader and has flown over 4,000 hours on a variety of combat and trainer aircraft. He has held a variety of operational and staff appointments during his career. His operational assignments include command of a frontline fighter squadron and an Air Defence Director Centre in the sensitive Rajasthan sector.

Source: Hindu

Aeronautical Society of India

The Aeronautical Society of India was established in 1948 with the objective to promote the advancement and diffusion of the knowledge of aeronautical and aerospace sciences and technologies as well as elevation of the aeronautical and aerospace profession. The Prime Minister of India, Dr Manmohan Singh is the Patron-in-Chief and Shri V Thulasidas, former CMD, Air India is its current President of the Council. The Society's Journal of Aerospace Sciences and Technologies being published as quarterly is among the prestigious ones that are published in the world. The circulation is world wide and is patronised by aeronautical and aerospace scientists, technologists, academicians, aviation and aerospace industries, airlines and professionals engaged in various allied fields.

With a view to commemorate 60 years of valuable service rendered by the Aeronautical Society of India and coinciding with Aero India 2009 International Seminar, it is proposed to bring-out a Special Issue of the Journal covering wide spectrum of contributions by specialists in various fields. It is appropriate, therefore, institution such as yours participate in the proposed Special Issue with an advertisement. The tariff for a full page multicolour advertisement in the Special Issue is Rs. 25,000/- from India or US \$ 500/- for overseas. The special issue will be distributed to all the delegates of the International Seminar – Aero India 2009 as well as to the opted Members, Subscribers, Corporate Members of the Aeronautical Society of India in India and abroad totaling over 4000. The Special issue will be formally released by an eminent personality during the International Seminar Aero India 2009.

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